

Aluminum: The New Mercury?

By Lawrence B. Palevsky, MD, FAAP

A growing number of physicians, scientists and parents strongly believe that mercury from many sources, including the preservative thimerosal, contributes to developmental issues in children, including autism spectrum disorders. Now experts are looking at the effects of aluminum, another heavy metal with known neurotoxic effects, which may also be negatively impacting the health of our children. More than 10 years ago, the American Academy of Pediatrics (AAP) issued a position paper stating that “aluminum is now being implicated as interfering with a variety of cellular and metabolic processes in the nervous system and in other tissues.”

Aluminum in Vaccines

Aluminum, like mercury, is present both in the environment and in many childhood vaccines. The following childhood vaccines contain aluminum: DTaP, Pediarix (DTaP-Hepatitis B-Polio combination), Pentacel (DTaP-HIB-Polio combination), Hepatitis A, Hepatitis B, Haemophilus influenzae B (HIB), Human Papilloma Virus (HPV) and Pneumococcal vaccines. The role of how genetic factors affect long term adverse health outcomes for those injected with aluminum containing vaccines is unknown.

Premature babies are at particular risk for aluminum toxicity. Yet the aluminum content of their IV feeding solutions combined with that of the Hepatitis B vaccine, if given at birth, far exceeds the 10-25 mg limit recommended by the FDA.

Scientists have limited understanding of what happens to children's bodies when aluminum is injected into them, including whether or not it accumulates in tissues and organs or is properly eliminated. A review of the medical literature on aluminum reveals a surprising lack of scientific evidence that injected aluminum is safe. Is it possible that injected aluminum plays a role in the growing numbers of children with diagnosed asthma and allergies, indicating an impairment, or even irreversible damage to their nervous and immune systems?

Aluminum serves as an adjuvant to vaccines, forcing the body to produce a strong antibody response. How injected aluminum interacts with other vaccine ingredients such as mercury, formaldehyde and the antibiotic neomycin, may reveal the most significant relationship between aluminum in vaccines and the damage it imparts on the long term health of our children's nervous and immune systems. Lab experiments performed by Boyd Haley, PhD, Professor Emeritus of Chemistry at the University of Kentucky, show the damaging effects aluminum has on nerve cells, especially when they are exposed to this metal in the presence of other vaccine ingredients. Haley's data, however, have been ignored by the scientific, medical and governmental institutions making vaccine policies.

The Immune System

The human immune system has three main parts: TH1, TH2 and TH3. These three arms are immature at birth, and develop as the nervous system, skin, airways and intestines are exposed to the environment. Antibiotics, poor nutrition, stress, exposure to heavy metals and other environmental toxins, and the use of vaccines, may interfere with the proper maturation of these three arms of the immune system.

TOXICITY



The hallmark of a healthy, mature immune system is an equal TH1, TH2 and TH3 immune response to the natural environment. In theory, if the TH system is permitted to mature on its own, and is not interfered with, children develop mature, balanced TH1, TH2 and TH3 immune systems by age three.

TH1, TH2 and TH3 require an important synergistic relationship to function properly. As soon as one or more of these three arms begins to over- or under-work in relation to the other, chronic illness occurs. Children are not born with TH dysfunction, although they may inherit susceptibility. How then, do children develop the expression of immune impairments, into chronic illness?

Aluminum's Effect on the Immune System

Aluminum in vaccines selectively targets the up-regulation of TH2 cells, driving up the production of antibodies. It forces the undeveloped and immature immune system of infants and children to produce greater amounts of TH2 antibodies before their immune systems have a chance to adapt to the world.

Even though aluminum in the vaccines specifically targets the over-activation of TH2 to encourage the body to produce antibodies, any direct or indirect effect of aluminum on the health or maturation of the TH1 or TH3 system is unknown. No scientific studies exist to help us understand the nature of the progression of TH1, TH2 and TH3 immune responses to any of the injected materials in vaccines. Aluminum appears to play a vital role in disrupting the maturation of the immune system in infants and children through its effects on TH2 and therefore, on TH1 and TH3.

Other Vaccine Ingredients: More Toxic Affects?

Singling out each individual vaccine ingredient as a detriment to the health of our children makes no sense. First we removed thimerosal, despite contentions from the medical community that no real medical reasons existed to do so. Now we focus on aluminum. What about formaldehyde or Polysorbate-80? Are we going to wait to hear about their damaging effects before we demand that they be removed?

All vaccine ingredients are poisonous, carcinogenic or potentially harmful to the skin, gastrointestinal, pulmonary, immune and neurological systems. We must examine both the individual as well as the interactive effects of all vaccine ingredients to understand their potential harm on human tissue and function.

The Hippocratic Oath: First Do No Harm

Without adequate science about safety, and with positive evidence of toxicity from aluminum, injected alone or in conjunction with other ingredients, we must invoke precautionary principles that do no harm. Until we understand why certain chronic and developmental conditions may develop in susceptible children, injecting vaccines containing aluminum and other poisons into anyone should be halted until we have scientific proof of safety. Parents, scientists and practitioners must stand up and demand the examination of all vaccine ingredients and their interactions. Nothing less is acceptable.

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